

What is claimed is:

1. A semiconductor manufacturing apparatus, comprising:  
a wafer support that has a tapered lateral side that  
supports an edge of a wafer from below said wafer;  
5 a stage on which said wafer is placed;  
wafer clamps that come into contact with the perimeter  
of said wafer from above said wafer.

2. The semiconductor manufacturing apparatus according to  
claim 1, further comprising a holder that accommodates said  
10 wafer clamps.

3. The semiconductor manufacturing apparatus according to  
claim 2, wherein said holder is tubular.

4. The semiconductor manufacturing apparatus according to  
claim 2, wherein said wafer clamps are attached to said holder  
15 by a screw.

5. The semiconductor manufacturing apparatus according to  
claim 2, further comprising a seat that accommodates said holder.

6. The semiconductor manufacturing apparatus according to  
claim 5, wherein said seat is tubular.

20 7. The semiconductor manufacturing apparatus according to  
claim 5, wherein said holder is attached to said seat by a screw.

8. The semiconductor manufacturing apparatus according to  
claim 5, wherein male threads are formed in the outside of said  
holder and female threads that mesh with said male threads are  
25 formed inside said seat.

9. The semiconductor manufacturing apparatus according to  
claim 1, wherein said wafer is placed on said stage by said

stage supporting a center portion of said wafer from below said wafer.

10. The semiconductor manufacturing apparatus according to claim 1, wherein said stage is an electrode.

5 11. The semiconductor manufacturing apparatus according to claim 1, wherein said stage accommodates a chuck for placing said wafer on said stage.

12. The semiconductor manufacturing apparatus according to claim 11, wherein said stage is of a cylindrical shape having a hollow portion and accommodates said chuck in said hollow portion.

13. In a semiconductor manufacturing apparatus having a wafer support that has a tapered lateral side that supports an edge of a wafer from below said wafer; wafer clamps that come into contact with the perimeter of said wafer from above said wafer; and a stage that supports said wafer on upper surface thereof,

a positioning jig, that is to be employed for positioning said wafer clamps, comprises:

20 a recess that fits onto said stage so as to cover same; and

a lateral side that, in a state in which said recess is fitted onto said stage, comes into contact with said wafer clamps, thereby specifying the position of said wafer clamps.

25 14. The positioning jig according to claim 13, wherein said lateral side is perpendicular to said upper surface of said stage when said recess is fitted onto said stage.

15. The positioning jig according to claim 13, wherein said positioning jig is of a cylindrical or prismatic shape that has said recess in a bottom side thereof.

16. The positioning jig according to claim 13, comprising:  
5 an upper structure of a cylindrical or prismatic shape; and

a lower structure that has a cylindrical or prismatic shape and whose upper and bottom sides are wider than the bottom side of said upper structure;

10 wherein said recess is formed in the bottom side of said lower structure.

17. A wafer-securing method, comprising:  
disposing a stage that has an upper surface, and on whose said upper surface a wafer is placed; and a wafer support  
15 that has a tapered lateral side that supports an edge of said wafer from below said wafer;

placing said wafer on said stage and determining the position at which said wafer is to be placed by said edge of said wafer coming into contact with said lateral side; and

20 securing said wafer by using wafer clamps that come into contact with the perimeter of said wafer from above said wafer.

18. The wafer-securing method according to claim 17, further comprising a step in which said wafer clamps are  
25 attached inside the holder.

19. The wafer-securing method according to claim 18, wherein, as said holder, a holder of a tubular shape is selected.

20. The wafer-securing method according to claim 18,  
wherein, said wafer clamps are attached to said holder by a  
screw.

21. The wafer-securing method according to claim 18,  
5 comprising a step in which said holder is attached inside the  
seat.

22. The wafer-securing method according to claim 21,  
wherein a tubular shape is selected for said seat.

23. The wafer-securing method according to claim 21,  
10 wherein said holder is attached to said seat by a screw.

24. The wafer-securing method according to claim 21,  
wherein, as said holder, a holder is selected that has male  
threads formed in the outside thereof; and, as said seat, a seat  
is selected that has female threads formed in the inside thereof  
15 that mesh with said male threads.

25. The wafer-securing method according to claim 17,  
further comprising:

fitting a positioning jig, that has a lateral side and  
a recess that is fitted onto said stage, onto said stage so as  
20 to cover same; and

positioning said wafer clamps by bringing said wafer  
clamps into contact with said lateral side of said jig.

26. The wafer-securing method according to claim 25,  
wherein, as said jig, a jig is selected whose lateral side is  
25 perpendicular to said upper surface of said stage when said  
recess is fitted onto said stage.

27. The wafer-securing method according to claim 25,  
wherein, as said jig, a jig is selected that is of a cylindrical  
or prismatic shape that has said recess in a bottom side thereof.

28. The wafer-securing method according to claim 25,

5 wherein, as said jig, a jig is selected that comprises:

an upper structure of a cylindrical or prismatic  
shape; and

a lower structure that has a cylindrical or prismatic  
shape and whose upper and bottom sides are wider than the bottom  
10 side of said upper structure;

and that has said recess formed in the bottom side of  
said lower structure.

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